

IN THE CLAIMS

Listing of Claims:

Claim 1 (Previously Presented): A process for preparing crystalline desloratadine Form I substantially free of Form II comprising the steps of:

- a) preparing a solution of desloratadine in a solvent selected from the group consisting of acetonitrile, di-methyl formamide, tetrahydrofuran and diethylcarbonate, wherein crystalline desloratadine Form I crystallizes out of the solution; and
- b) recovering the crystalline desloratadine Form I.

Claim 2 (Original): The process of claim 1, wherein the solvent is acetonitrile.

Claim 3 (Original): The process of claim 1, wherein the solvent is di-methyl formamide.

Claim 4 (Original): The process of claim 1, wherein the solvent is tetrahydrofuran.

Claim 5 (Original): The process of claim 1, wherein the solvent is diethylcarbonate.

Claim 6 (Original): The process of claim 1, further comprising a drying step.

Claim 7 (Original): The process of claim 1, wherein the solution is cooled to about 20°C to about 30°C.

Claim 8 (Cancelled).

Claim 9 (Previously Presented): The process of claim 1 wherein the ratio of Form II to Form I is less than about 0.5% by weight.

Claim 10 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 15% to about 25%, said process comprising the steps of:

- a) preparing a solution of desloratadine in ethyl acetate;
- b) combining the solution with an anti-solvent to precipitate the crystalline desloratadine; and
- c) recovering the crystalline desloratadine.

Claim 11 (Original): The process of claim 10, wherein the anti-solvent is a C₂ to a C₈ ether.

Claim 12 (Original): The process of claim 11, wherein the ether is di-isopropyl ether.

Claims 13-14 (Cancelled).

Claim 15 (Original): The process of claim 10, wherein the anti-solvent is a C₅ to a C₁₂ saturated hydrocarbon.

Claim 16 (Original): The process of claim 15, wherein the hydrocarbon is hexane.

Claims 17-23 (Cancelled).

Claim 24 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 2% to about 10%, said process comprising the step of:

- a) preparing a solution of desloratadine in a C₁ to C₄ alcohol;

- b) combining the solution with water to precipitate the crystalline desloratadine;
and
- c) recovering crystalline desloratadine.

Claim 25 (Previously Presented): The process of claim 24, wherein the alcohol is ethanol.

Claim 26 (Previously Presented): The process of claim 24, wherein the Form I obtained has from about 2% to about 4% Form II.

Claim 27 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine ranges from about 5% to about 6%, said process comprising the steps of:

- a) preparing a solution of desloratadine in isopropanol,
- b) seeding the solution with Form II to increase the ratio of Form II to Form I;
wherein desloratadine the mixture of crystalline desloratadine precipitates from the solution; and
- c) recovering the crystalline desloratadine.

Claim 28 (Cancelled).

Claim 29 (Original): A process for preparing crystalline desloratadine Form II comprising the steps of:

- a) melting desloratadine to obtain a molten material;
- b) cooling the molten material to obtain a solid; and
- c) grinding the solid.

Claim 30 (Original): A process for preparing a mixture of crystalline desloratadine Form I and Form II comprising the step of

grinding crystalline desloratadine Form I.

Claim 31 (Previously Presented): A process for preparing crystalline desloratadine Form II comprising the steps of:

- a) preparing a solution of desloratadine in dimethyl carbonate, wherein desloratadine Form II precipitates from the solution; and
- b) recovering the crystalline desloratadine Form II.

Claim 32 (Previously Presented): The process of claim 31, wherein the crystalline desloratadine Form II recovered is substantially free of Form I.

Claim 33 (Previously Presented): A process for preparing a mixture of crystalline desloratadine composition comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 15% to about 25%, said process comprising the steps of:

- a) preparing a solution of desloratadine in i-butyl acetate, wherein Form I precipitates from the solution; and
- b) recovering the precipitate.

Claim 34 (Cancelled).

Claim 35 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 2% to about 6%, said process comprising the steps of:

- a) preparing a solution of desloratadine in a solvent selected from the group consisting of isopropanol and i-butanol, wherein desloratadine Form I precipitates from the solution; and
- b) recovering the crystalline desloratadine.

Claim 36 (Original): The process of claim 35, wherein the solvent is isopropanol.

Claim 37 (Previously Presented): The process of claim 36, wherein the mixture contains about 2% Form II compared to Form I by weight.

Claim 38 (Original): A process for preparing a mixture of crystalline Form I and Form II of desloratadine comprising the step of
drying desloratadine Form I crystals obtained by crystallization from a C₁ to a C₄ alcohol.

Claim 39 (Original): The process of claim 38, wherein the alcohol is isopropanol.

Claim 40 (Original): The process of claim 38, wherein the alcohol is isobutanol.

Claim 41 (Original): A process for making a mixture of crystalline desloratadine Form I and Form II comprising the steps of
combining a solution of desloratadine in a suitable solvent with an anti-solvent containing seeds of both Form I and Form II of desloratadine to precipitate the mixture, and
recovering the mixture.

Claim 42 (Original): The process of claim 41, wherein the mixture contains from about 35% to about 65% Form I by weight.

Claim 43 (Original): The process of claim 41, wherein the solvent is iso-butyl acetate.

Claim 44 (Original): The process of claim 41, wherein the antisolvent is a C₅ to C₁₂ hydrocarbon.

Claim 45 (Original): The process of claim 44, wherein the hydrocarbon is heptane.

Claim 46 (Previously Presented): A process for preparing a mixture of desloratadine crystalline comprising at least about 25% of both Form I and Form II, said process comprising the steps of:

- a) preparing a solution of desloratadine in a solvent selected from the group consisting of ethyl acetate and iso-butyl acetate, in a mixture with about 3% to about 20% C₁ to C₄ alcohol by volume, wherein the mixture of Form I and II precipitates from the solution; and
- b) recovering the mixture.

Claim 47 (Original): The process of claim 46, wherein the mixture contains at least about 40% of both forms by weight.

Claim 48 (Original): The process of claim 46, wherein the alcohol is present in about 10% by volume.

Claim 49 (Original): The process of claim 46, wherein the alcohol is selected from the group consisting of methanol, iso-propyl alcohol and mixtures thereof.

Claim 50 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) preparing a solution of desloratadine in iso-butyl acetate;
- b) combining the solution with a C₆ to C₁₂ aromatic hydrocarbon to precipitate the mixture, wherein the combining may be carried out before, after or during crystallization; and
- c) recovering the mixture.

Claim 51 (Original): The process of claim 50, wherein the hydrocarbon is heptane.

Claim 52 (Original): The process of claim 50, wherein the mixture contains from about 60% to about 70% Form I by weight.

Claim 53 (Original): The process of claim 50, further comprising increasing ratio of Form II to Form I by seeding the solution with a mixture of Form I and Form II before crystallization.

Claim 54 (Original): The process of claim 53, wherein the seeding results in about 35% to about 45% Form I compared to Form II by weight.

Claim 55 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) preparing a solution of desloratadine in iso-butyl acetate;
- b) combining the solution with iso-butyl acetate at a temperature lower than the solution to crystallize the mixture; and
- c) recovering the mixture.

Claim 56 (Original): The process of claim 55, further comprising seeding the solution with a mixture of Form I and Form II before crystallization.

Claim 57 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) preparing a solution of desloratadine in ethyl acetate;
 - b) seeding the solution with a mixture of Form I and Form II;
 - c) combining the solution with a C₅ to C₁₂ saturated hydrocarbon, wherein the combining may be carried out before, after or during crystallization;
- and

d) recovering the mixture of desloratadine Form I and II.

Claim 58 (Original): The process of claim 57, wherein the hydrocarbon is heptane.

Claim 59 (Original): The process of claim 57, wherein the mixture is about a 4:1 to about a 1:3 mixture of Form I to Form II wt/wt.

Claim 60 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) preparing a solution of desloratadine in 2-propanol and toluene, wherein the mixture of Forms I and II precipitates from the solution; and
- b) recovering the mixture.

Claim 61 (Original): The process of claim 60, wherein precipitation occurs as a result of cooling the solution.

Claim 62 (Original): The process of claim 60, wherein ratio of 2-propanol to toluene is less than about 20% by volume.

Claim 63 (Original): The process of claim 60, wherein precipitation occurs as a result of adding a C₅ to C₁₂ saturated hydrocarbon as an anti-solvent.

Claim 64 (Original): The process of claim 63, wherein the anti-solvent is n-heptane or n-hexane.

Claim 65 (Original): The process of claim 63, further comprising the step of seeding the solution.

Claim 66 (Previously Presented): A process for preparing a mixture of desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) providing a first solution of desloratadine in toluene;
- b) evaporating the toluene to obtain a residue;
- c) dissolving the residue in a mixture of toluene and a C₁ to C₄ alcohol to obtain a second solution;
- d) cooling the second solution to obtain a slurry; e) combining the slurry with a C₅ to C₁₂ saturated hydrocarbon to precipitate the mixture; and
- f) recovering the mixture.

Claim 67 (Original): The process of claim 66, wherein the alcohol is 2-propanol.

Claim 68 (Previously Presented): A process for preparing a mixture of desloratadine comprising Form I and Form II, said process comprising the steps of:

- a) combining desloratadine acetate, toluene and KOH to obtain a reaction mixture;
- b) heating the mixture, whereby two phases are obtained;
- c) separating the phases;
- d) concentrating the separated organic phase;
- e) dissolving the obtained concentrate in a toluene-2-propanol mixture containing less than about 20% 2-propanol by volume;
- f) cooling the solution to obtain a slurry;
- g) combining the slurry with cold n-heptane; and
- h) recovering mixture of desloratadine forms I and II.

Claim 69 (Original): The stable mixture of claim 68, wherein the process further comprises washing the product of step c with water.

Claim 70 (Original): The stable mixture of claim 68, wherein the process further comprises warming the product of step f to 45°C.

Claim 71 (Original): The process of claim 68, wherein the mixture is about a 24 to about a 40% Form II compared to Form I.

Claim 72 (Original): A process for preparing crystalline desloratadine Form II comprising the steps of crystallizing desloratadine from toluene, and recovering the crystalline form.

Claim 73 (Previously Presented): The process of claim 29, wherein the crystalline desloratadine Form II is substantially free of Form I.

Claim 74 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 35% to about 40%, said process comprising the steps of:

- a) preparing a solution of desloratadine in chloroform;
- b) combining the solution with an anti-solvent to precipitate the mixture of crystalline desloratadine; and
- c) recovering the mixture of crystalline desloratadine.

Claim 75 (Previously Presented): The process of claim 74, wherein the anti-solvent is a C₂ to a C₈ ether.

Claim 76 (Previously Presented): The process of claim 75, wherein the ether is di-isopropyl ether.

Claim 77 (Previously Presented): The process of claim 74, wherein the anti-solvent is a C₅ to a C₁₂ saturated hydrocarbon.

Claim 78 (Previously Presented): The process of claim 77, wherein the hydrocarbon is hexane.

Claim 79 (Previously Presented): The process of claim 74, wherein the solution has an initial temperature of at least about 40°C.

Claim 80 (Previously Presented): A process for preparing a mixture of crystalline desloratadine comprising Form I and Form II, wherein the amount of Form II, based on the total amount of desloratadine, ranges from about 2% to about 6%, said process comprising the steps of:

- a) preparing a solution of desloratadine in chloroform;
- b) combining the solution with an anti-solvent to precipitate the mixture of crystalline desloratadine; and
- c) recovering the mixture of crystalline desloratadine.

Claim 81 (Previously Presented): The process of claim 80, wherein the anti-solvent is a C₂ to a C₈ ether.

Claim 82 (Previously Presented): The process of claim 81, wherein the ether is di-isopropyl ether.

Claim 83 (Previously Presented): The process of claim 80, wherein the anti-solvent is a C₅ to a C₁₂ saturated hydrocarbon.

Claim 84 (Previously Presented): The process of claim 83, wherein the hydrocarbon is hexane.

Claim 85 (Previously Presented): The process of claim 80, wherein the solution has an initial temperature of less than about 40°C.

Claim 86 (Previously Presented): The process of claim 80, wherein the amount of Form II is about 2% wt/wt.

Claim 87 (Previously Presented): The process of claim 80, wherein the amount of Form II is about 2% wt/wt.